

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-32 (Canceled).

Claim 33 (Currently Amended): A method according to claim ~~25~~ 68, comprising introducing an agent capable of counteracting the formation of a secondary cataract by epithelial cell growth on the capsular bag inner wall, before delivering the lens forming material.

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Claim 34 (Previously Presented): A method of performing visual correction in a patient by replacing the natural lens with a lens implant comprising:

(a) excising an area of the anterior capsular bag of the eye having a sufficient size to surgically remove the natural lens;


(b) locating a sealing device comprising a flexible plug part and removable adjusting means of a size sufficient to cover said excised area with said adjusting means to a position where a peripheral anterior surface of said plug part contacts the inner posterior wall so as to sufficiently cover said excised area;

(c) delivering a lens filling material into the capsular bag by using a delivering means to temporarily displace and/or deform said plug part to admit passage into the capsular bag of said material;

(d) before removing the delivery means, introducing lens forming material into the capsular bag to an extent that said material exerts a sufficient pressure on the posterior side of the plug part to seal the excised area, so said lens material is prevented from being displaced from the capsular bag to the posterior chamber of the eye; and

(e) finalizing the lens forming process in the eye.

Claim 35 (Original): A method according to claim 34, wherein said excised area is intersected by the optical axis.

 Claim 36 (Currently Amended): A method according to claim 35, wherein said excised area has ~~a largest diameter that~~ is of a size sufficient to essentially extends over the visual field.

Claim 37 (Original): A method according to claim 34, comprising removing the adjustment means of the sealing device from the eye after completing the introduction of lens forming material into the capsular bag.

Claim 38 (Original): A method according to claim 34, comprising removing the adjustment means of the sealing device from the eye upon finalizing the lens forming process.

Claim 39 (Original): A method according to claim 34, comprising introducing an agent capable of counteracting the formation of a secondary cataract by epithelial cell growth on the capsular bag inner wall, before delivering the lens forming material.

Claim 40 (Withdrawn and Currently Amended): A method according to claim 34, comprising the step of introducing the lens-forming material to the capsular bag through a cut in the plug part.

Claim 41 (Currently Amended): A method according to claim 34, comprising measuring the corneal topography of the cornea and thereby the amount of aberrations of a wavefront arriving from the cornea and selecting a sealing device having a plug part with at least one surface that is capable of compensating ~~compensate~~ for at least one such aberration.

Claim 42 (Previously Presented): A method according to claim 41, including estimating at least one aberration of the lens to be formed in the capsular bag and selecting a sealing device having a plug part which together with said implanted lens is adapted to compensate for at least one such aberration.

Claim 43 (Currently Amended): A method according to claim 34 41, comprising introducing an agent capable of counteracting the formation of a secondary cataract by epithelial cell growth on the capsular bag inner wall, before delivering the lens forming material.

Claim 44 (Currently Amended): A sealing device for use in ophthalmic surgery to replace a catarcteous and/or presbyopic natural lens, comprising a flexible plug part adapted to seal a capsulorhexis of a capsular bag without additional sealing means and to admit an injection device for injecting a lens-forming liquid material through the capsulorhexis, said plug part having slightly larger area than the capsulorhexis and being made of a deformable polymer, wherein said sealing device further comprises an anteriorly protruding removable adjusting means connected to the plug part and capable of positioning said plug part to a desired location.

Claim 45 (Previously Presented): A sealing device according to claim 44, wherein the sealing device is free from any parts protruding out from the capsular bag subsequent to the surgical process.

Claim 46 (Previously Presented): A sealing device according to claim 44, wherein said plug part is essentially disc-shaped.

Claim 47 (Previously Presented): A sealing device according to claim 44, wherein said plug part is adapted to be placed at the inside of the capsular bag covering the whole capsulorhexis.

Claim 48 (Previously Presented): A sealing device according to claim 44, wherein said plug part is made of a suitable soft material and is sufficiently thin to follow accommodation movements of the capsular bag.

Claim 49 (Previously Presented): A sealing device according to claim 44, wherein said plug part is made of a silicon material.

Claim 50 (Previously Presented): A sealing device according to claim 44, wherein said plug part is made of a material having essentially the same refractive index as the material inserted in the capsular bag.

Claim 51 (Withdrawn): A sealing device according to claim 44, wherein the plug part is provided with contacting means to the capsular bag, wherein the contacting means is adapted to ensure that a correct accommodating process is established.

Claim 52 (Withdrawn): A sealing device according to claim 51, wherein said contact means comprises a friction-enhanced part of an anterior surface of the posterior plug.

Claim 53 (Withdrawn): A sealing device according to claim 52, wherein at least a surface contacting the inner wall of the capsular bag has a roughened surface.

Claim 54 (Withdrawn): A sealing device according to claim 44, including an anteriorly extending ring in the middle with a diameter adapted to fit into the rhexis from below, the ring being adapted to stabilize the position of the sealing device in the rhexis.

Claim 55 (Previously Presented): A sealing device according to claim 44, wherein the removable adjusting means comprises at least one flexible thread attached to the plug part.

Claim 56 (Previously Presented): A sealing device according to claim 55, wherein the at least one thread protrudes in an anterior direction from the plug part.

Claim 57 (Previously Presented): A sealing device according to claim 56, wherein said at least one thread is of a length sufficient to protrude outside the eye and can be manipulated from outside the eye.

Claim 58 (Withdrawn): A sealing device according to claim 44, wherein the plug part is provided with a cut adapted to admit passage of a lens-forming material.

Claim 59 (Withdrawn): A sealing device according to claim 58, wherein the cut is provided with an overlapping part adapted to seal the cut when the injection is completed.

Claim 60 (Previously Presented): A sealing device according to claim 44 adapted to be positioned in a rhexis of about 1 mm in diameter positioned off the optical axis of the eye.

Claim 61 (Previously Presented): A sealing device according to claim 44 adapted to be positioned in a rhexis of more than 1 mm in diameter positioned to include the optical axis of the eye.

Claim 62 (Previously Presented): A sealing device according to claim 44 adapted to remain in the capsular bag after an intraocular lens-forming process is completed.

Claim 63 (Previously Presented): A sealing device according to claim 61, wherein said plug part is optically clear.

Claim 64 (Currently Amended): A sealing device according to claim 61, ~~herein~~ wherein said plug part is adapted to cover the whole path of light that is admitted by the pupil.

Claim 65 (Previously Presented): A sealing device according to claim 64, adapted to compensate for aberration.

Claim 66 (Previously Presented): A sealing device according to claim 64, adapted to correct for error of refraction in the eye.

Claim 67 (Previously Presented): A sealing device according to claim 44, adapted to be removed after the intraocular lens-forming process is completed.

Claim 68 (Currently Amended): A method of obtaining visual correction subsequent to surgically removing the natural lens, comprising the steps of:

inserting a plug part of a sealing device through a capsulorhexis, said plug part being adapted to cover and seal the capsulorhexis from the inside of the capsular bag without additional sealing means;

adjusting the location of said plug part with an adjusting means operable from the outside of the capsular bag;

delivering a lens-forming material through the capsulorhexis into the capsular bag by using a delivering means and by displacing and/or deforming the plug part to admit the material; and

removing the delivering means from the eye, whereby the plug part retains a sealing position, thereby preventing displacement of the lens-forming liquid material from the capsular bag.

Claim 69 (Previously Presented): A method according to claim 68, further comprising the step of removing the sealing device through the capsulorhexis when the lens-forming process is completed.


Claim 70 (Previously Presented): A method according to claim 68, comprising the step of removing the adjusting means when the plug part seals the capsulorhexis by the influence of the lens-forming material in the capsular bag.

Claim 71 (Previously Presented): A method according to claim 68, comprising the step of controlling the position of said plug part by means of the adjusting means.

Claim 72 (Withdrawn): A method according to claim 68, comprising the step of delivering the lens-forming material to the capsular bag through a cut in the plug part and through the capsulorhexis.

Claim 73 (Previously Presented): A method according to claim 68, further comprising measuring the error of refraction of the eye and optionally selecting a sealing device having a plug part capable of at least partially compensating for an error of refraction.

Claim 74 (Previously Presented): A method according to claim 68, further comprising measuring the corneal topography of the cornea and thereby the amount of aberrations of a wavefront arriving from the cornea, and selecting a sealing device having a plug part with at least one surface that is capable of compensating for at least one such aberration.

 Claim 75 (Previously Presented): A method according to claim 68, including estimating at least one aberration of the lens to be formed in the capsular bag and selecting a sealing device having a plug part which is adapted, together with an implanted lens, to compensate for at least on such aberration.

